

**530 RIPRAP.**

**(REV 10-29-12) (FA 12-4-12) (7-13)**

ARTICLE 530-1 (Page 690) is deleted and the following substituted:

**530-1 Description.**

Construct riprap composed of sand-cement or rubble (consisting of broken stone or broken concrete) as shown in the Design Standards and in the Plans. Place Type D-2 geotextile filter fabric, meeting the requirements shown on Design Standards, Index No. 199, and a minimum 1 foot thick layer of bedding stone under all rubble riprap.

SUBARTICLE 530-2.2.1 (Page 690) is deleted and the following substituted:

**530-2.2.1 Rubble (Bank and Shore Protection):** Provide sound, hard, durable rubble, free of open or incipient cracks, soft seams, or other structural defects, consisting of broken stone with a bulk specific gravity of at least 2.20. Ensure that stones are rough and angular.

For this application, use broken stone meeting the following gradation and thickness requirements:

Weight Maximum Pounds	Weight 50% Pounds	Weight Minimum Pounds	Minimum Blanket Thickness in Feet
670	290	60	2.5
Ensure that at least 97% of the material by weight is smaller than Weight Maximum pounds. Ensure that at least 50% of the material by weight is greater than Weight 50% pounds. Ensure that at least 85% of the material by weight is greater than Weight Minimum pounds.			